



TOWN OF HEMPSTEAD
DEPARTMENT OF BUILDINGS

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VIA ELECTRONIC FILING

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: WT Docket No. 16-421 Streamlining Deployment of Small Cell Infrastructure

Dear Secretary Dortch:

The Commission has requested assistance in developing a “factual record” to enable a “data-driven evaluation” of how best to “facilitate the deployment” of small cell, DAS, and 5G wireless infrastructure while “preserving local authorities’ ability to protect interests within their purview,” such as “aesthetics and safety.” Public Notice (December 22, 2016) at 2. The Town of Hempstead, New York, has worked hard and with considerable success for many years to provide its citizens with the full benefits of the latest wireless and cellular technology while ensuring the safety of wireless facilities and limiting their negative impacts on the community. I have been responsible as plans examiner for virtually all wireless and cellular building permit applications in the Town since 2007 and write on behalf of the Town to provide the Commission with a brief overview of that history for its factual record. That historical record provides a vivid example of the potential dangers of aggressive wireless deployments without adequate local oversight and the Town’s success with a local wireless ordinance that has allowed full, timely deployment of the latest wireless services while protecting public safety and minimizing disruption of local communities.

From 2007 to 2010, the rapid expansion of cellular sites in the Town resulted in a rapid increase of citizen concerns, particularly the intrusive industrial appearance of towers, news reports of illegal, unpermitted construction and unsafe conditions at sites, possible effects of RF emissions, potential lowering of property values, and general concerns about the impact of any new commercial or industrial activity in residential areas. While RF emissions are governed by federal standards and play no role in local review, the other areas are traditionally and properly subject to local regulation in light of local circumstances. Citizens opposing proposals for new cellular sites became increasingly vocal, a trend exacerbated by some in the wireless industry who were dismissive of legitimate citizen concerns, suggesting local regulations were a pretext for impermissible regulation of RF emissions and denying the legitimate scope and value of local government regulatory authority.

To address its concerns about such rapid wireless expansion with insufficient oversight, the Town enacted an ordinance in 2010 which specifically regulated the siting of wireless facilities as a supplement to its Building Code regulations. Hempstead Town Code, Chapter 142 (Wireless Telecommunications Facilities), the current 2013 version of which is available online (<http://ecode360.com/15516264>).

Chapter 142 § 1 states the Town's intent, which is essentially the same as that of the Commission as stated in the Public Notice: encouraging the provision and enhancement of wireless services while protecting local interests. Chapter 142 goes on to specify in detail the procedures for review of applications, the various documentation which might be required for various types of applications, factors and preferences to be considered, compliance with federal and state laws and applicable safety standards, etc. Then the final section, Chapter 142 § 24, provides that these detailed requirements can be relaxed as appropriate in individual cases consistent with the broad principle in Section 1 to encourage wireless services while protecting local interests.

Reasonable Cooperation under Chapter 142. Over the more than six years Chapter 142 has been in place, a period which included the full deployment of 4G services, the Town has granted well over 500 wireless applications while denying none. While there have been a few disagreements over interpretation of the "Shot Clock" and Section 6409 in specific circumstances, they have been amicably resolved; while the wireless carriers have the right to bring expedited challenges in federal court to Town actions under Chapter 142, they have not ever done so while Chapter 142 has been in force.

One provision of Chapter 142 that I believe has significantly contributed to this positive record is the Town's use of an outside expert consultant at the applicant's expense to evaluate and make recommendations to the Town. While carriers sometimes complain in general about the expense, they have never brought a court challenge to the actual amount actually expended in reviewing of any one of their applications.

Another thing that makes the Town's application process more efficient is my practice of offering—and encouraging—pre-application site visits and conferences to identify issues that appear important and requirements that appear unnecessary and could be waived in the particular circumstances. I have found that this procedure consistently reduces delays and overall costs for applications, and most carriers take advantage of these meetings. The carriers are well aware of and exercise their right to request waiver of Chapter 142 requirements in appropriate circumstances, and such waivers are granted when appropriate. This flexibility has also allowed the Town to agree to simplified procedures for large blocks of similar applications, e.g., consolidating multiple DAS or small cell applications.

This record of effective cooperation between the Town and local representatives of the wireless carriers is factual support for the Commission's frequent practice of relying on local governments and the wireless industry to work out issues reasonably and efficiently. This principle is particularly important in consideration of aesthetics, impact on an adjacent community, suitability of alternate sites, and other such matters. Decisions will require evaluation of issues of great local importance but whose specifics will vary greatly from one region or community to another. While nationwide rules on procedures, time deadlines, physical dimensions under Section 6409, etc., may achieve uniformity at limited cost, there is no possible nationwide rule to adequately specify what is aesthetically acceptable and in sufficient harmony with its surrounding community that could fairly apply both in Montana and Manhattan. The Commission has rightly left issues such as these to resolution by the local governments and local wireless providers involved, leaving it for the courts to decide occasional disputes over whether applications were denied on improper or on legitimate grounds.

In contrast, prior to the enactment of the Town's comprehensive telecommunications ordinance the record of cooperation was not good between the Town and what I refer to as the national representatives of some carriers, as opposed to the local representatives I worked with day-to-day. In 2010, Verizon Wireless, AT&T, T-Mobile and Sprint filed suit in federal court to declare the Town's recently enacted Chapter 142 void. New York SMSA et al. v. Town of Hempstead, 10-CV-4997 (E.D.N.Y.). (I will refer to a few documents filed in that case below by their number in the court docket, so they can be retrieved online by anyone interested.) Sprint came to the Town early in the case, disclosed several illegal sites

constructed without permits, paid fines, legalized the sites, and withdrew from the case. But the other three continue to litigate the case, claiming among many other things that the Town's "hostility" is so great that it "intends to delay the provision of wireless service as long as possible" and "prohibit" wireless services in the Town. Carrier Motion, Dkt. 152 at 26. The national representatives of these three carriers dismiss the Town's six years of effective cooperation and consistent granting of permits as some sort of trick—"while its actions are under the microscope of judicial scrutiny"—but "one shudders at the prospect of the Town's unfettered abuse of its authority once the case is resolved." Carrier Letter, Dkt. 169 at 2.

Improved Safety and Compliance under Chapter 142.

The cooperation achieved over the last six years at the local level is all the more remarkable since the Town discovered numerous instances of violations of the Town Building Code by wireless carriers in the weeks after Chapter 142 was enacted and moved aggressively to remedy them. The Town retained an expert consultant (Eduardo Orellana, Director of Communications for RF/Wireless at Integrated Strategic Resources) to assist in an audit of over 100 cell sites in the Town (primarily on rooftops), and found that almost every site was in violation of the Building Code in one or more respects. Orellana Affidavit, Dkt 155-3. Because of its importance, I am submitting a copy of the Orellana Affidavit and exhibits to this application. In many cases the sites were not being maintained in safe condition according to federal, state and local standards. New sites had been constructed and operated without any building permits, i.e., without the Town's knowledge. Carriers had begun construction or modification of sites with a permit but then did not obtain the required inspection and certificate of completion. Such sites often did not conform to the original permit that the Town had issued.

These were not technical "paper violations." The failure to apply for permits avoided inspections of the sites, effectively concealing widespread safety violations at wireless facilities in the Town. Among the more serious health and safety violations found in the audit and documented in the Orellana Affidavit were the following:

- About 17% (8/47) MPE (Maximum Permissible Exposure) reports submitted to the Town in carrier applications claimed compliance with the federal RF emissions standards (OET Bulletin 65) despite the fact that the actual RF emissions data in the report indicated noncompliance.
- About 30% (14/47) of the MPE reports submitted to the Town in carrier applications reported that a rooftop site was in compliance with federal RF emissions standards were incorrectly based on data for RF emissions from the rooftop measured only at street level; no data was provided on the higher levels which would be expected on the rooftop itself.
- Four sites were not properly grounded and presented a risk of electrocution and electrical and fire damage; the valuable copper grounding bars had presumably been stolen.
- The structural analyses of ballast mounts to hold rooftop antennas in place were generally calculated incorrectly, creating a risk of failure in high wind conditions or structural failure on an overloaded rooftop.
- All except one of the analyses of limits for wind and ice loading submitted to the Town in carrier applications audited were performed under a superseded predecessor of the current ANSI/TIA-222-G-2005 standard, risking underestimation of the potential for structural failure.
- 65% of the structural analyses submitted by carriers in applications to the Town did not contain the calculations required by law to be included.

The data submitted in carrier applications for four rooftop sites actually predicted RF emissions in excess of the federal occupational MPE limit. The consultants visited these sites wearing Radman XT monitors and confirmed that RF emissions exceeded the federal occupational limit in areas accessible to workers on the rooftop. An MPE report for another rooftop site estimated RF emissions at 871.1 % of the General Population MPE limit, which was the applicable limit because that rooftop was open to public access. Lack of required signage and locks to prevent access was often observed. The Orellana Affidavit concluded “we found safety hazards and potential safety hazards that warrant concern and follow-up.” Dkt. 155-3 at 21.

The Town issued dozens of violations to wireless carriers and others responsible. These were only a fraction of the total number of violations it had identified. Many of the violations were admitted, but the carriers asserted that the violations were merely “paper violations” of little significance. The violations and penalties were litigated in Nassau District Court and ultimately settled to the Town’s satisfaction. While the settlement agreements included a confidentiality clause, it is a matter of public record that a number of wireless carriers subsequently identified their unpermitted sites and brought them into compliance with federal, state, and local laws and standards.

The Town continues to monitor the wireless facilities in its jurisdiction and enforce Chapter 142. It is extremely confident that its adoption of Chapter 142 and its investigations of compliance with federal, state and local laws at wireless facilities in the Town have substantially reduced health and safety hazards to the general public in the Town and in particular to workers and others on rooftops where cellular antennas are installed.

Data-Driven Evaluation. There is no reason to expect that similar unsafe conditions and violations of building codes are not present in many other municipalities across the county. Orellana notes that the rates of noncompliance for RF emissions in wireless sites in the Town are somewhat higher but broadly consistent with the 10% noncompliance rate found by Richard Tell in over 1,000 cell sites in the country over a period of years. Dkt. 155-3 at 19.

This record of widespread safety violations and avoidance of permitting and inspection requirements is highly relevant factual data for the Commission as it considers whether to credit anecdotal assertions by the wireless industry that local laws and regulations are unnecessary, cost far too much, and are in reality only pretexts for delay and denial of deployment of wireless services or code words for irrational fears of RF emissions. As to the federal RF emissions standards, the Town simply requires submission of reports showing compliance with federal RF standards and has checked to see if the reports are free of clear errors and supported by data which establish—rather than contradict—federal compliance. The FCC requires such reports itself, but is not sufficiently staffed to enforce them. So it has for many years encouraged local assistance in ensuring compliance with federal RF emissions requirements for wireless facilities. A Local Government Official’s Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance (FCC 2000) (currently being updated). Dkt. 155 Brock Declaration Exhibit H.

To make a data-driven decision, the Commission will have evaluate the reliability of industry representations on technical capabilities, cost, operations, federal, state and local regulations, local government willingness and ability to advance wireless deployment, and many other potentially relevant factors. If industry claims that local governments in general can’t be trusted to balance the benefits of better wireless services with the disadvantages of industrial intrusions in neighborhoods and potential safety issues, the Commission should recall the wild assertions of some carriers about the Town of Hempstead and insist on reliable data to support claims of that local regulation is unnecessary and cost too much. If industry asserts that accommodating local interests is unnecessary, delays deployment, and costs too much, the Commission should consider the unsafe conditions uncovered and addressed by the

Town of Hempstead with Chapter 142. Are the industry claims based on publicly available data or only on anecdotal, perhaps atypical incidents and their representations of their own internal costs and operations data? Is their data publicly available for independent analysis, or does industry refuse to make it public, citing competitive disadvantage?

Local governments and their citizens are overwhelmingly in favor of better and better wireless services, but they want also want wireless sites to be safe and inconspicuous. Their interests are closely aligned with those the Commission laid out in its Notice: enabling wireless deployment without unnecessary damage to local interests. The obligation of a wireless carrier is simply to its shareholders. This is of course our American system and quite proper. But their claims should be evaluated with that in mind.

Public Acceptance. That brings me to a final major change for the Town of Hempstead due to Chapter 142. In 2009 and 2010, meetings and hearings on proposals for cellular sites were noisy, with people staying late, overflowing the halls and auditoriums. Chapter 142 not only made the cell sites in the Town safer and less obtrusive, it made the people in the Town comfortable that the cell sites in the Town were safer and less obtrusive. And so in January 2017, after six years under Chapter 142, when the Town held a hearing on a proposed new cellular site on the edge of a residential neighborhood—no one rose to speak in favor or in opposition.

Achieving that level of comfort in the public is the way for wireless services to be most quickly and widely deployed: reasonable accommodations of industry needs and local needs. If local communities are allowed to exercise their traditional authority over the safety and intrusiveness of wireless deployments, then the process will go smoothly and the controversy will recede. The Commission should look to involve the local governments and citizens in a constructive way, regulating the aesthetics and monitoring the safety of wireless deployments.

The new small cell and DAS and 5G deployments will often be interspersed in neighborhoods, inevitably out someone's bedroom window, and if poorly managed could unnecessarily generate renewed concerns. Wireless deployment without adequate local review in the locality of deployment will not be effective. Preempting broad areas of traditional local authority would leave behind territory with minimal federal or local oversight. With minimal federal or local oversight and intense competitive pressures, races to deploy new wireless technology could again lead to unsafe and unsightly wireless sites and widespread disregard of building regulations and safety standards. That could well revive the sort of intense local opposition to wireless deployments we have seen in the past, and which still lingers in some localities. Wireless services and other technological innovations will be best served by policies which balance and fairly accommodate federal, local, and industry interests—protecting legitimate local interests by local review to encourage public acceptance.

Respectively submitted,

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